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EXAMINER				
CHANKONG, DOHIM				
ART UNIT		PAPER NUMBER		
2452				
NOTIFICATION DATE		DELIVERY MODE		
10/21/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto-incoming@parklegal.com  
Office.Action@xerox.com

### Office Action Summary

**Application No.**

10/058,268

**Applicant(s)**

EDWARDS ET AL.

**Examiner**

DOHM CHANKONG

**Art Unit**

2452

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 7-12, 14, 15, 18-23, 25, 26 and 29-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 7-12, 14, 15, 18-23, 25, 26 and 29-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This non-final rejection is in response to Applicant's request for continued examination. Applicant amends claims 1, 3, 4, 7-10, 12, 14, 15, 19, 23, 25, 26, and 30, cancelled claims 6, 17, and 28, and previously cancelled claims 2, 5, 13, 16, 24, and 27. Accordingly, Applicant presents claims 1, 3, 4, 7-12, 14, 15, 18-23, 25, 26, and 29-33 for further examination.

#### **I. CONTINUED EXAMINATION UNDER 37 CFR 1.114**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/9/2010 has been entered.

#### **II. DOUBLE PATENTING**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

*Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**A. Claims 1, 8, 12, 19, 23, and 30 are rejected on the ground of nonstatutory obvious-type double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 7296042 [“‘042 patent”].**

Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences between the claims are merely obvious variations as illustrated in the following table.

Application No. 10/058268	‘042 Patent
<b>Claim 1.</b> A system for enabling components to transfer data between each other, the system comprising: a processor; a memory; a first component comprising a data object; a universal data interface comprising object-oriented mobile code, which is	<b>Claim 1.</b> A system for enabling one or more arbitrary components to communicate with each other, the system comprising:  a first component associated with one or more universal interfaces, wherein the one or more universal interfaces comprise executable code and data;

<p>transmitted between a plurality of components and executed instructions on the components to facilitate file access and printing to the components prior to initiating a data transfer, wherein the data object controls the universal data transfer interface, wherein the instructions return a data type supported by the first component and device type and operating status of the first component, thereby facilitating the first component to negotiate with a second component to select a transfer medium for transferring data between the first and second components based on the data type;</p> <p>an intermediary component configured to invoke the universal data transfer interface to request for and receive a data transfer session object (DTSO) and to transfer the DTSO to the second component, wherein the DTSO includes source-specific object-oriented mobile code that is interpreted and executed by the second component; and wherein the DTSO is invoked by the second component to transfer the data between the first component and the second components.</p>	<p>a second component obtaining one of the one or more universal interfaces associated with the first component, wherein the second component includes a discovery mechanism configured to discover the first component; wherein the second component automatically invokes at least one of the universal interfaces to communicate with the first component; and wherein the second component and the first component do not share a standard communication protocol which is distinct from a discovery protocol that is part of the discovery mechanism.</p> <p><b>Claim 7.</b> ...wherein a third component transfers a data object to the second component, the data object having the one or more universal interfaces associated with the first component</p> <p><b>Claim 9.</b> ...wherein the one or more universal interfaces comprise object-oriented mobile code having instructions for obtaining, interpreting, viewing or modifying data associated with one or more collections of components...</p>
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The other independent claims are rejected for similar reasons.

### III. CLAIM REJECTIONS - 35 U.S.C. § 101

#### A. Claims 23, 25, 26, 29, and 30-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

These claims are rejected for reciting “computer readable medium.” The broadest reasonable interpretation of “computer readable medium” typically covers forms of non-transitory tangible media and transitory propagating signals *per se*. To overcome this rejection, Applicant’s should amend the claims to recite “non-transitory computer readable storage medium.”

#### IV. CLAIM REJECTIONS – 35 U.S.C. § 112

- A. Claims 3, 4, 18, 29, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

These claims are rejected because they lack proper antecedent basis for “the third component.” For the purposes of this rejection, the term will be interpreted as “second component.”

#### V. CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- A. Claims 1, 3, 4, 7-12, 14, 15, 18-23, 25, 26, and 29-33 are rejected under 35 U.S.C § 103(a) as being unpatentable over *Reed et al*, U.S Patent No. 6,345,288 [*“Reed”*], in view of *Hanson*, U.S. Patent No. 6,148,346.**

All citations in the following claim mappings are to *Reed* unless otherwise noted.

**Claims 1, 8, 12, 19, 23, and 30**

As to claim 1, *Reed* as modified by *Hanson* discloses a system for enabling components to transfer data between each other, the system comprising:

a processor [column 13 «lines 12-18»];

a memory [column 13 «lines 12-18»];

a first component comprising a data object [Figure 1 | column 7 «line 59» to column 8 «line 3» | column 105 «line 66» to column 106 «line 16» where : *Reed*’s distribution service object is analogous to Applicant’s data object];

a universal data interface comprising object-oriented mobile code [*Hanson*, column 3 «lines 37-41»: the device driver is written in Java and providers for “dynamic connection” between devices (i.e., a universal interface)], which is transmitted between a plurality of components [*Hanson*, column 2 «lines 36-39»: transmitting device drivers between a computer and peripheral device (i.e., components)] and executed instructions on the components to facilitate file access [column 3 «lines 21-41»: improving upon prior art file transferring by allowing dynamic connection] and printing to the components prior to initiating a data transfer [*Hanson*, column 5 «lines 26-43»],

wherein the data object controls the universal data transfer interface [column 105 «line 66» to column 106 «line 16»],

wherein the instructions return a data type supported by the first component [*Hanson*, Fig. 6A «item 72a»: returning different data types supported by the printer (e.g., Postscript, PCL, Printing System) and device type and operating status of the first component [*Hanson*, Fig. 5: returning printer types | column 5 «lines 33-36»: returning status of the printer], thereby facilitating the first component to negotiate with a second component to select a transfer medium for transferring data between the first and second components based on the data type [column 12 «lines 44-50» | column 14 «lines 39-60» & *Hanson*, Fig. 5: disclosing different “emulations” which consist of the data types supported by each printer (e.g., HDE/Meister supports Postscript file type)];

an intermediary component configured to invoke the universal data transfer interface to request for and receive a data transfer session object (DTSO) [Figure 1 | Figure 28 | column 12 «line 63» to column 13 «line 3» | column 14 «lines 43-53» | column 86 «lines 64-66» : transferring of the message object with the communications object and *Reed*’s distribution server corresponds to the intermediary component. The distribution server facilitates transferring of the DTSO from the first component (provider computer) to the second component (consumer computer)] and to transfer the DTSO to the second component [column 98 «lines 14-24»: where the communications object is sent using the methods (interface) of the distribution service object],

wherein the DTSO includes source-specific object-oriented mobile code that is interpreted and executed by the second component [*Hanson*, column 3 «lines 37-41»: & *Reed*, column 8 «lines 54-56» | column 17 «lines 26-46»: *Reed*’s communications object is analogous to Applicant’s claimed DTSO]; and



wherein the DTSO is invoked by the second component to transfer the data between the first component and the second components [column 8 «lines 6-19» | column 17 «lines 25-28» | column 67 «lines 17-65» | column 70 «lines 51-67» where : *Reed*'s communications object is analogous to Applicant's claimed DTSO & *Hanson*, column 3 «lines 26-41»].

As indicated in the foregoing mapping, *Reed* does not expressly disclose (A) that a universal data interface or DTSO comprises object-oriented mobile code nor does *Reed* disclose (B) instructions that return data types supported by the first component, device types, or operating status of the component. However, both features were well known in the art at the time of Applicant's invention as evidenced by *Hanson*.

**A. *Hanson* discloses a universal data interface and a DTSO comprising object-oriented mobile code.**

In a similar field of invention to *Reed*, *Hanson* is directed to a system for allowing communication between various devices in a system [*Hanson*, abstract & *Reed*, abstract]. *Hanson* and *Reed* are both directed for allowing different devices to discover information that is used to transfer files to another device [*Hanson*, column 1 «line 55» to column 2 «line 5» & *Reed*, column 8 «lines 21-44»]. Specifically, they both disclose one device transferring a communication object to another device where the object is used to initiate the transfer [*Hanson*, column 2 «lines 1-5»: device driver passed between devices & *Reed*, column 8 «lines 52-64»].

As cited above, *Hanson* further discloses a universal data and a DTSO (i.e., *Hanson*'s device driver) comprising object-oriented mobile code (i.e., Java) which allows disparate devices to transfer files and initiate printing. It would have been obvious to one of ordinary skill in the art to have modified *Reed* to include *Hanson*'s universal data interface and DTSO comprising mobile object-oriented code. One would have been motivated to modify *Reed* because *Hanson*

discloses that the dynamic device driver is useful for “providing two-way communication” and a “dynamic connection” between devices in a network [*Hanson*, column 2 «lines 1-5» | column 3 «lines 37-41»].

**B. *Hanson* also discloses instructions that return data types, device types, and an operating status of components.**

As cited above, *Hanson* also discloses returning data types (i.e., document types such as Postscript) supported by the first component, and device type (i.e., printer type) and operating status (i.e., printer status) of the first component which facilitates first component and second component to select a transfer medium for transferring data between the first and second components.

It would have been obvious to one of ordinary skill in the art to modify *Reed* to *Hanson*'s teachings of instructions for returning data types supported by the first component, a device type, and an operating status.. One would have been motivated to provide such a combination to provide a means for *Reed* to obtain the supported data formats and types of a consumer computer as represented by *Hanson*'s feature.

**C. Independent claims 8, 12, 19, 23, and 30**

As to claims 8, 12, 19, 23, and 30, they are rejected for at least the same reasons set forth for claim 1.

**Claims 3, 14, 20, 25, and 31**

As to claim 3, *Reed* as modified by *Hanson* discloses the second component sends a second DTSO to the first component to be used by the first component for receiving data transmitted from the second component [column 42 «line 31» to column 43 «line 14» | column 74 «lines 37-42»].

Claims 14, 20, 25, and 31 are rejected for at least the same reasons set forth for claim 3.

**Claims 4, 15, 21, 26, and 32**

As to claim 4, *Reed* as modified by *Hanson* discloses the second component receives the DTSO from the first component to be used by the second component for receiving data transmitted from the first component [column 67 «lines 18-65»].

Claims 15, 21, 26, and 32 are rejected for at least the same reasons set forth for claim 4.

**Claims 7, 11, 18, 22, 29, and 33**

As to claim 7, *Reed* as modified by *Hanson* discloses the DTSO is configured to indicate completion responsive to the first component or to the at least one of the plurality of components indicating that the data transfer has completed or failed [column 85 «line 60» to column 86 «line 10»].

Claims 11, 18, 22, 29, and 33 are rejected for at least the same reasons set forth for claim 1.

**Claim 9**

*Reed* as modified by *Hanson* discloses the intermediary component sends the DTSO to the first component to be used by the first component for receiving data transmitted from the second component [Figure 1 | Figure 28 | column 12 «line 63» to column 13 «line 3» | column 14 «lines 43-53» | column 86 «lines 64-66» : transferring of the message object with the communications object and *Reed's* distribution server corresponds to the intermediary component].

**Claim 10**

*Reed* as modified by *Hanson* discloses the intermediary component sends the DTSS to the second component to be used by the second component for receiving data transmitted from the first component [Figure 1 | Figure 28 | column 12 «line 63» to column 13 «line 3» | column 14 «lines 43-53» | column 86 «lines 64-66» : transferring of the message object with the communications object and *Reed*'s distribution server corresponds to the intermediary component].

**VI. CONCLUSION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/  
Primary Examiner, Art Unit 2452